

ANIMAL HEALTH INFORMATION

Zoonotic Diseases affecting farm animals and animals at petting zoos

MA Department of Agricultural Resources, Division of Animal Health, Biosecurity and Dairy Services
251 Causeway Street, Suite 500, Boston, MA 02114 Phone: 617/626-1795 Website: www.mass.gov/agr

Zoonoses are diseases transmissible between animals and humans.

The following is a partial list of diseases transmissible from farm animals and animals at petting zoos to humans. The illnesses can be very mild to fatal in people. Key to prevention for most of these diseases is thorough handwashing; these diseases are primarily spread through fecal/oral transmission.

This list includes only diseases more likely to occur in Massachusetts. Please be advised that people traveling from other areas of the US or other parts of the world may be exposed to other zoonotic diseases.

This listing is an excerpt from The Merck Veterinary Manual, Eighth Edition. The manual is available on-line at <http://www.merckvetmanual.com/mvm/index.jsp>.

Bacterial Diseases

DISEASE	CAUSITIVE ORGANISM	PROBABLE TRANSMISSION TO HUMAN
Brucellosis	Brucella abortus	Occupational exposure
Leptospirosis	Leptospira interrogans	Contact with water, food, or soil containing urine from infected animals
Mycobacteriosis	Mycobacteriosis	Being investigated as cause of Crohn's disease; ingestion exposure
Psittacosis and Ornithosis	Chlamydia psittaci	Exposure to aerosols
Salmonellosis	Salmonella spp (2000 serotypes, 200 seen in the USA)	Foodborne infection, especially in the elderly, infants, or immunosuppressed; occupational and recreational exposure
Tuberculosis (See also mycobacteriosis, above.)	Mycobacterium bovis	Ingestion, inhalation, occupational exposure, rare in USA

Rickettsial Diseases

DISEASE	CAUSITIVE ORGANISM	PROBABLE TRANSMISSION TO HUMAN
Q fever	Coxiella burnetii	Mainly airborne; exposure to placenta; occasionally ticks and milk

Fungal Diseases

DISEASE	CAUSITIVE ORGANISM	PROBABLE TRANSMISSION TO HUMAN
Ringworm (Dermatophytosis)	Microsporum , Trichophyton , and Epidermophyton spp	Direct contact with infected animals and fomites - inanimate objects or substances capable of transmitting organisms

Viral Diseases

DISEASE	CAUSITIVE ORGANISM	PROBABLE TRANSMISSION TO HUMAN
Eastern equine encephalomyelitis	EEE virus (alphavirus)	Mosquitoes (Culiseta melanura and Aedes spp)
West Nile fever	West Nile virus (flavivirus)	Bites of mosquitoes (Culex univittatus , C pipiens , C modestus)